Education

Ph.D. Biology, University of Saskatchewan, Saskatchewan, 2009

B.A. Communication, University of Toledo, Ohio, 1992

Certifications

Bear Safety, May, 2009

Arctic Survival Skills, February, 2009

Wilderness First Aid, March, 2008

CPR, March, 2015

Firearms Possession and Acquisition, July, 2002

Golder Associates Ltd. – Victoria

Wildlife Biologist
Population ecology specialist involved with terrestrial wildlife and wildlife habitat assessments, population modelling. Services include study design, data collection and analysis and communicating results.

Employment History

University of Saskatchewan – Saskatoon, Saskatchewan
Graduate Research Assistant (2002 to 2008)

Conducted original research in population ecology in waterfowl. Responsibilities included literature review, writing research proposals, securing funding, collecting and analysing data and communicating results through presentations, reports, and scientific journals.

Canadian Wildlife Service – Yellowknife, Northwest Territories
Contracted Biology Analyst (Fall 2008)

Analysed data sampled from 1907-2007 literature sources to delineate critical reproductive periods for migratory birds in the Northwest Territories and Nunavut.

Environment Canada – Cardinal Lake, Northwest Territories
Contracted Research Technician (Spring 2008)

Conducted population and mark-recapture surveys of lesser scaup (*Aythya affinis*) and white-winged scoter (*Melanitta deglandi*) ducks in a remote arctic location southeast of Inuvik, Northwest Territories.

Ohio Division of Wildlife – Oak Harbor, Ohio
Seasonal Research Technician (Fall 2001)

Conducted telemetry and visual surveys of laser-harassed urban Canada geese (Branta canadensi) at locations throughout the greater Cleveland area, Ohio.

Delta Waterfowl Foundation – Egeland, North Dakota
Seasonal Research Technician (Summer 2001)

Conducted waterfowl population and nest surveys and monitored nests to determine productivity.

Ducks Unlimited Inc. – Minot, North Dakota
Seasonal Research Technician (Summer 2000)

Located and monitored nests of upland nesting waterfowl to determine productivity.

PROJECT EXPERIENCE – PROJECT EXPERIENCE

Agnico Eagle Mines Whale Tail Project, Nunavut, Canada	Completed caribou cumulative effects and zone of influence analyses to support the environmental effects report. June 2017 to August 2017.
Tlicho All Season Road Project, Government of the Northwest Territories, Northwest Territories, Canada	Wildlife technical lead for the Adequacy Statement Response for the Tlicho All Season Road Project Description Report. December 2016 to present.
Cumulative Impact Monitoring Program, Government of the Northwest Territories, Northwest Territories, Canada	Completed winter range resource selection function modeling of collared Bathurst caribou. Analysis integrated data on collared caribou, different vegetation communities (land cover types), development disturbance, wildfire and selection patterns described by Aboriginal Traditional Knowledge. April 2016.
NextBridge East-West Tie Project, Thunder Bay, Ontario, Canada	Wildlife team member for environmental effects on wildlife for the East-West Tie Project Environmental Assessment Report. August 2016 to December 2016.
Dominion Lynx/Jay Projects, Northwest Territories, Canada	Planned, managed and reported on baseline wildlife monitoring activities caribou, raptors and waterfowl. Component lead for environmental effects on wildlife for the Jay Project Developer's Assessment Report. Prepared wildlife management plans. July 2012 to current.
Snap Lake Diamond Mine Northwest Territories, Canada	Completed statistical analysis of and reported on stable isotope analysis of large-bodied fish at Snap Lake. July 2013.
Snap Lake Diamond Mine Northwest Territories, Canada	Wildlife technical lead for wildlife monitoring programs including study design, monitoring, data analysis and reporting of environmental effects on wildlife Planned, managed and reported on wildlife monitoring for caribou, grizzly bear, raptors and wolverine. January 2010 to 2015.
Diavik Diamond Mine Northwest Territories, Canada	Wildlife technical lead for wildlife monitoring programs including study design, monitoring, data analysis and reporting of environmental effects on wildlife in the Lac De Gras Region. March 2011 to present.
NICO Cobalt, Copper, Gold Bismuth Project, Northwest Territories, Canada	Planned, managed and reported wildlife baseline studies and supported the environmental assessment in the Projects Developer's Assessment Report. Prepared wildlife management plans. February 2009 to present.
Gahcho Kué Diamond Project Northwest Territories, Canada	Planned, managed and reported on wildlife baseline studies for caribou, grizzly bear, wolverine, raptors, and water birds supporting the Project's Environmental Impact Statement. Prepared wildlife management plans. November 2010 to present.

Bluefish Hydroelectric Northwest Territories, Canada	Provided technical support for the fish mercury study design. Work included power analysis to determine sample size requirements for monitoring.
Taltson Hydroelectric Expansion Project Northwest Territories, Canada	Provided technical support for the environmental assessment of the proposed Taltson Hydroelectric Expansion Project. Work included information requests, design of monitoring for water birds along Trudel Creek.
Migratory Bird Incidental Take Permit Applications Northwest Territories, Canada	Served as Project Manager for study for the Canadian Wildlife Service on the potential number of industry proponents and activities in Canada expected to apply for a migratory bird Incidental Take Permit. June, 2010.
Diavik Diamond Mine Northwest Territories, Canada	Review and assessment of wildlife impact predictions for the Diavik Diamond Mine using monitoring results from 1998 to 2008. March, 2010.
L-68 Well Re-entry Northwest Territories, Canada	Terrestrial environmental setting survey and assessment for Canadian Forest Oil for well re-entry west of Fort Liard, NWT. December, 2009.
Lutsel K'e Mini Hydro Northwest Territories, Canada	Terrestrial environmental setting survey and assessment for Northwest Territories Energy Corporation's mini hydro project on the Snowdrift River near Lutsel K'e, NWT. December, 2009.

SUPPLEMENTAL SKILLS

Analytical software

SAS, version 9.1, JMP version 7.0, SPSS, Statistica, R, Programs MARK, PRESENCE and DISTANCE

PUBLICATIONS

Refereed Journal Articles

Virgl, John A., Jim Rettie, and Daniel W. Coulton. Spatial and temporal changes in seasonal ranges of a declining barren-ground caribou herd. Rangifer 37 (2017), 31-46.

Coulton, Daniel W., John A. Virgl, and Colleen English. Falcon Nest Occupancy and Hatch Success Near Two Diamond Mines in the Southern Arctic, Northwest Territories. *Avian Conservation and Ecology 8 (2013), 14.*

Coulton, Daniel W., Robert G. Clark, David W. Howerter, Leonard I. Wassenaar and Michael G. Anderson. Costs and benefits of natal dispersal in yearling mallards *Anas platyrhynchos*. *Journal of Avian Biology*, 42 (2011), 123-133.

Coulton, Daniel W., Robert G. Clark, Leonard I. Wassenaar, David W. Howerter and Michael G Anderson. Social and habitat correlates of immigrant recruitment

of yearling female Mallards to breeding locations. *Journal of Ornithology*, 152 (2011), 781-791.

Coulton, Daniel W., Robert G. Clark and Craig E. Hebert. Determining natal origins of birds using stable isotopes ($\delta^{34}S$, δD, $\delta^{15}N$, $\delta^{13}C$): Model validation and spatial resolution for mid-continent mallards. *Waterbirds*, 33 (2010), 10-21.

Coulton, D. W., R. G. Clark, K. A. Hobson, L. I. Wassenaar and C. E. Hebert. Temporal sources of deuterium (δD) variability in waterfowl feathers across a boreal-to-prairie gradient. *Condor*, 111 (2009), 255-265.

Coulton, Daniel W. and Robert G. Clark. An integrated stable isotope mark-recapture approach to modeling sources of population rescue. *Auk*, 125 (2008), 923-931.

Conference Proceedings

Coulton, D. W., K. Dawe, J. A. Virgl and A. Karras. 2016. *Bathurst caribou winter range selection: Patterns related to land cover, wildfire, development and Traditional Knowledge*. Geoscience Forum 2016, November. Yellowknife, Canada.

Coulton, D. W., J. A. Virgl and J. Rettie. 2016. *Spatial and temporal changes in seasonal range attributes in a declining barren-ground caribou population*. Geoscience Forum 2016, November. Yellowknife, Canada.

Coulton, D. W. and R. G. Clark. 2009. *Reproductive experience and nest tunnel use by female mallards*. 5th North American Duck Symposium, August. Mississauga, Canada.

Coulton, D. W., R. G. Clark, D. W. Howerter, M. G. Anderson and L. I. Wassenaar. 2008. *Testing the site familiarity hypothesis by assessing consequences of natal dispersal decisions in yearling female mallards*. 126th meeting of the American Ornithologists Union, August. Portland, USA.

Coulton, D. W., R. G. Clark, C. E. Hebert, D. W. Howerter and M. G. Anderson. 2006. *Social and environmental cues influencing immigration rates of Parkland mallards*. 4th North American Duck Symposium, August. Bismarck, USA.

Coulton, D. W., R. G. Clark, C. E. Hebert and K. A. Hobson. 2006. *Sources of recruits in two prairie mallard breeding populations*. 4th North American Duck Symposium, August. Bismarck, USA.

Coulton, D. W., R. G. Clark, K. A. Hobson and S. Lariviere. 2004. *Sources of yearling recruits to local parkland mallard populations: identifying natal origin using* δD, $\delta^{13}C$, *and* $\delta^{15}N$ *values in feathers*. 122nd meeting of the American Ornithologists Union, August. Quebec, Canada.

Coulton, D. W., R. G. Clark, K. A. Hobson and S. Lariviere. 2004. *Recruitment to local parkland mallard populations: identifying natal origin using* δD, $\delta^{13}C$ *and* $\delta^{15}N$ *values in feathers*. 4th International Conference on Applications of Stable Isotope Techniques, April. Wellington, New Zealand.

Coulton, D. W., R. G. Clark, K. A. Hobson and S. Lariviere. 2003. *Exploring sources of immigrants to mallard populations by identifying natal origins of yearling birds using stable-hydrogen, -carbon and -nitrogen isotopes*. 3rd North American Duck Symposium, November. Sacramento, USA.